

REMARKS

The Office Action dated May 18, 2006, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto.

Claims 18-33 are pending and claims 31-32 are withdrawn. Claim 18, 27, 28, and 31-33 are amended. The amendments are supported by the originally filed specification and claims. In particular, the amendments to claims 18 and 33 are supported by the second full paragraph on page 4 and the last full paragraph on page 12 of the specification. Meanwhile, claims 17, 27, 28, and 31-33 are amended to correct typographical errors as suggested by the Examiner. No new matter is added.

Claims 18, 27, 28, and 33 are objected to for the asserted informalities. Applicants submit that these objections have been rendered moot by the above amendments to claims 18, 27, 28, and 33, as suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of these objections to claims 18, 27, 28, and 33.

Claims 18-30 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of Kapeliouchko et al. (U.S. Patent No. 6,790,932 B2). This rejection is traversed.

Applicants respectfully disagree with the Examiner's statement in the last full paragraph of page 5 of the Office Action, that "claim 19 in ... Kapeliouchko et al. relate to 'thermoprocessable' PTFE homopolymer and/or nonmodified PTFE (copolymer) in the form of fine powders (see title and abstract)." In contrast, Kapeliouchko et al. discloses

"[a] process for obtaining non-thermoprocessable fine powders" (Kapeliouchko et al., Abstract and claim 1) (emphasis added).

Meanwhile, Applicants note that the Examiner himself has acknowledged that present claims 18 and 33 are instead directed to thermoprocessable TFE copolymers. See, for example, the paragraph bridging pages 4-5 of the Office Action stating that "[p]arent Claim 18 and its dependent Claims 19-30 of the present invention relate to 'thermoprocessable' tetrafluoroethylene (TFE) copolymers ..." (emphasis in original).

Applicants also note that thermoprocessable TFE copolymers of the presently claimed invention have a melt viscosity (see, e.g., Specification, page 11, lines 13-14), whereas the "non-thermoprocessable" copolymers of Kapeliouchko et al. would not show any melt viscosity. Applicants note that Kapeliouchko does not make any reference to melt viscosity. As such, Applicants submit that thermoprocessable TFE copolymers are not the same as non-thermoprocessable TFE copolymers.

For at least the above reasons, Applicants request reconsideration and withdrawal of the rejection of claims 18-30 and 33 under the judicially created doctrine of obviousness-type double patenting over claim 19 of Kapeliouchko et al.

Claims 18-30 and 33 are rejected under 35 U.S.C. § 102(e) as being anticipated by Blong et al. (U.S. Patent No. 6,693,164). This rejection is traversed.

Applicants respectfully submit that Blong et al. does not teach or suggest "thermoprocessable TFE copolymers in gel form containing an amount of extractable cations lower than 1 ppm and an amount of surfactant lower than 10 ppm" of present

claims 19 and 33. Dependent claims 19-30 are patentable for at least the same reasons as independent claim 19.

In contrast, as already noted by the Examiner, "the gel-type purifying process as specified (... is quite different from Blong's agglomerating and then fluorinating process for purification)" (Office Action, page 8, third full paragraph) (emphasis added).

Blong et al. discloses the following method:

- ... a method for the production of a high purity fluoropolymer comprising the steps of
 - a) providing a fluoropolymer having extractable ions, and
 - b) contacting the fluoropolymer with an aqueous acid medium for a time sufficient to remove the extractable ions from the fluoropolymer.

(Blong et al., column 1, lines 39-45). Blong et al. also discloses that "[t]his invention is preferably used when the fluoropolymer is a thermoplastic" (Blong et al., column 1, lines 53-54).

Further, Blong et al. discloses that "the removal of unstable groups by means of fluorination" and that the "fluorination step is preferably accomplished in the agglomerate form of the fluoropolymer. The fluoropolymer is preferably dry during fluorination" (Blong et al., column 4, lines 1-12). The meaning of the expression "agglomerate form" in Blong et al. can be drawn from the following:

A PFA copolymer with an MFI of 2, melting point of 308°C, and polymerized by means of well-known emulsion polymerization, is finished by means of three different work-up methods. The first two steps of the work-up procedure, namely the gasoline agglomeration, drying at 270°C., are the same in all three methods.

(Blong et al., column 6, lines 56-64 under the subtitle "Examples") (emphasis added). As such, Applicants submit that the term "agglomerate" is used in Blong et al. to refer to the polymer solid recovered from the polymer latex.

Blong et al. also discloses that "[a]fter the unstable end-groups are substantially removed in the fluorination step, the treated agglomerates are normally melt pelletized" (Blong et al., column 5, lines 50-53). "The pellets made from the treated agglomerates are then subjected to an aqueous extraction and, optionally, a subsequent washing operation in order to remove extractable ions" (Blong et al., column 5, lines 62-65).

Blong et al. is also concerned with "metal impurities" of resins. See, e.g., column 2, lines 60-61 of Blong et al. The Examples of Blong et al. disclose the following:

In Example 1, the work-up is completed by fluorinating the agglomerate in a stationary bed. ... The fluorinated agglomerate is then melt pelletized. The pellets are subjected to an acid extraction with 2% HNO₃ ... The analytically determined iron and fluorine contents are listed in Table 1.

(Specification, Example 1, paragraph bridging columns 6-7). Examples 2 and 3 prepared the product using a similar fluorination step as in Example 1, and Examples 4 and 5 use the acid extraction step of Example 1. Blong et al. discloses that both unstable end-groups and iron impurities were reduced (see, e.g., the Tables throughout columns 7, 9, and 10).

Thus, Blong et al. does not anticipate the presently claimed invention, as there is no disclosure of a thermoprocessable TFE copolymer having the characteristics of the presently claimed invention.


For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 18-30 and 33 under 35 U.S.C. § 102(e) as being anticipated by Blong et al.

III. Conclusion

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number **108910-00124**.

Respectfully submitted,



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